WE CLAIM:

1. A multilayered polymer film, comprising:

a plurality of first optical layers comprising a birefringent first copolyester; and

a plurality of second optical layers comprising a second copolyester having an in-plane birefringence of about 0.04 or less, at 632.8 nm, after the multilayered polymer film has been formed, wherein the second copolyester comprises carboxylate subunits derived from t-butyl-isophthalic acid or an ester thereof.

2. The multilayered polymer film of claim 1, wherein up to 30 mol% of the carboxylate subunits of the second copolyester are derived from t-butyl-isophthalic acid or an ester thereof.

3. The multilayered polymer film of claim 1, wherein the first copolyester comprises naphthalate subunits.

4. The multilayered polymer film of claim 1, wherein the second copolyester further comprises carboxylate subunits derived from cyclohexane dicarboxylic acid or an ester thereof.

5. The multilayered polymer film of claim 4, wherein the carboxylate subunits of the second copolyester are 5 to 95 mol% t-butyl-isophthalate and 5 to 95 mol% cyclohexane dicarboxylate.

6. The multilayered polymer film of claim 1, wherein the carboxylate subunits of the second copolyester further comprise naphthalate subunits.

7. The multilayered polymer film of claim 1, wherein the carboxylate subunits of the second copolyester further comprise terephthalate subunits.

8. The multilayered polymer film of claim 1, wherein the second copolyester further comprises glycol subunits derived from C2-C4 diols.

9. The multilayered polymer film of claim 8, wherein the second copolyester further comprises glycol subunits derived from 1,6-hexanediol or isomers thereof, trimethylol propane, or neopentyl glycol.

10. The multilayered polymer film of claim 1, wherein the second copolyester further comprises carboxylate subunits and 0.01 to 2.5 mol% of the combined carboxylate and glycol subunits of the second copolyester are derived from compounds having three or more carboxylate or ester functionalities, three or more hydroxy functionalities, or a combination thereof.

11. The multilayered polymer film of claim 1, wherein one in-plane index of refraction of the first copolyester is approximately equal to one in-plane index of refraction of the second copolyester after the multilayered polymer film has been formed.

12. The multilayered polymer film of claim 1, wherein the second copolyester further comprises glycol subunits derived from ethylene glycol, propylene glycol, or 1,4-butanediol.

13. The multilayered polymer film of claim 1, wherein the first and second copolyesters both comprise naphthalate subunits.

14. The multilayered polymer film of claim 1, wherein the second copolyester comprises glycol subunits selected from ethylene and butylene and comonomer glycol subunits derived from propylene glycol; 1,6-hexanediol; neopentyl glycol; polyethylene glycol; diethylene glycol; tricyclodecanediol; 1,4-cyclohexanedimethanol or isomers thereof;

norbornanediol; bicyclo-octanediol; trimethylol propane; pentaerythritol; 1,4-benzenedimethanol or isomers thereof; bisphenol A; 1,8-dihydroxy biphenyl and isomers thereof; or 1,3-bis(2-hydroxyethoxy)benzene.

15. A multilayered polymer film, comprising:

a plurality of first optical layers comprising a birefringent first copolyester; and

a plurality of second optical layers comprising a second copolyester having an in-plane birefringence of about 0.04 or less, at 632.8 nm, after the multilayered polymer film has been formed, wherein the second copolyester comprises glycol subunits derived from trimethylol propane.

16. The multilayered polymer film of claim 15, wherein 0.01 to 5 mol% of the glycol subunits of the second copolyester are derived form trimethylol propane.

17. The multilayered polymer film of claim 16, wherein 0.1 to 2.5 mol% of the glycol subunits of the second copolyester are derived form trimethylol propane.

18. The multilayered polymer film of claim 15, wherein the first copolyester comprises naphthalate subunits.

19. The multilayered polymer film of claim 15, wherein the second copolyester comprises naphthalate subunits.

20. The multilayered polymer film of claim 19, wherein the second copolyester further comprises terephthalate subunits.

21. The multilayered polymer film of claim 15, wherein the second copolyester further comprises carboxylate subunits derived from cyclohexane dicarboxylic acid or an ester thereof.

22. The multilayered polymer film of claim 15, wherein the second copolyester further comprises glycol subunits derived from C2-C4 diols.

23. The multilayered polymer film of claim 22, wherein the second copolyester further comprises glycol subunits derived from 1,6-hexanediol or isomers thereof.

24. The multilayered polymer film of claim 15, wherein one in-plane index of refraction of the first copolyester is approximately equal to one in-plane index of refraction of the second copolyester after the multilayered polymer film has been formed.

25. The multilayered polymer film of claim 15, wherein the first and second copolyesters both comprise naphthalate subunits.